INTERNATIONAL SEARCH REPORT

International application No. PCT/KR 2004/002270

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: F16H 61/12, F02D 45/00.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC⁷: F16H, F02D, E16H, G05B, G01K, G01M, G06F.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPI, EPODOC, PAJ.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	US 5 830 106 A (ABE M. et al.) 3 November 1998 (03.11.1998) abstract, figures 1, 4-5, 7-14, column 2, line 16 to column 3, line 64.	1-3, 5-10	
Α	JP 2004 011869 A (NISSAN MOTOR CO LTD) 15 January 2004 (15.01.2004) abstract, figures 1-4.	4-5, 7-10	
A	JP 2003 294128 A (JATCO LTD) 15 October 2003 (15.10.2003) abstract, figures 1-2.	1, 5-10	

Further documents are listed in the continuation of Box C.	'•
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Sec patent family annex.

- Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search 20 December 2004 (20.12.2004)

Date of mailing of the international search report
5 January 2005 (05.01.2005)

· Name and mailing address of the ISA/AT

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International application No. PCT/KR 2004/002270

	ion). DOCUMENTS CONSIDERED TO BE RELEVANT	·	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No	
Α	US 5 848 381 A (ISHII, S. et al.) 8 December 1998 (08.12.1998) abstract, figures 1-3, 5.	1-3, 5-10	
Α	US 5 995 887 A (HATHAWAY, R. R. et al.) 30 November 1999 (30.11.1999) abstract, figures 1-3.	2, 4-5, 7-10	
			
Α	KR 2003 0040600 A (HYUNDAI MOTOR COMPANY) 23 May 2003 (23.05.2003) abstract, figure from abstract.	4-5, 7-10	
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INTERNATIONAL SEARCH REPORT

Intermental application No.
PCT/KR 2004/002270

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				JP	A	9329221	1997-12-22
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